## IN THE CLAIMS:

- 1. (currently amended) An electrically conductive composition which
- 2 comprises:
- a plurality of <u>cross-linked</u> polymeric complexes; each polymeric complex
- 4 comprising:
- 5 a strand of a  $\pi$ -conjugated polymer; and
- a strand of a polyelectrolyte, the polyelectrolyte being non-covalently bonded to
- 7 the  $\pi$ -conjugated polymer and having at least one reactive functional group, the reactive
- 8 functional group facilitating the cross-linkage between the polymeric complexes when
- 9 the complexes are heated, the composition resisting swelling when exposed to an aqueous
- 10 medium.